



results of BLAST

BLASTP 2.2.9 [May-01-2004]

Reference:

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1085452435-15497-118616244323.BLASTQ3

Query=

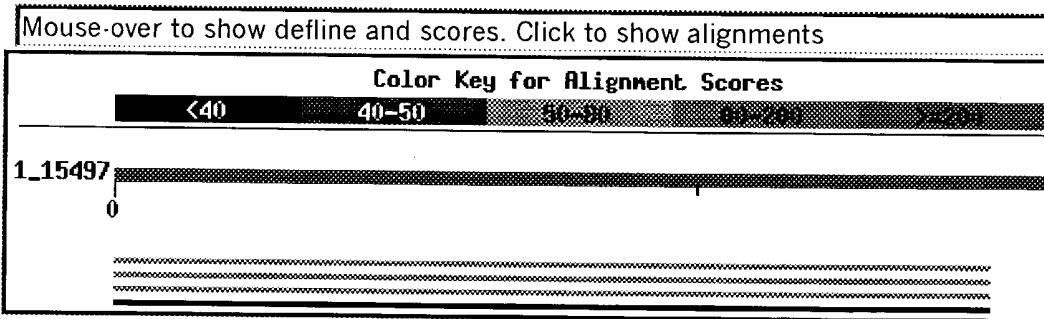
(16 letters)

Database: All non-redundant GenBank CDS translations+PDB+SwissProt+PIR+PRF excluding environmental samples
 1,837,236 sequences; 608,447,635 total letters

If you have any problems or questions with the results of this search please refer to the [BLAST FAQs](#)

[Taxonomy reports](#)

Distribution of 653 Blast Hits on the Query Sequence



Sequences producing significant alignments:

#77

		Score (bits)	E Value
gi 601931 gb AAA57153.1	neurofilament-H	51	3e-06
gi 226213 prf 1501343A	neurofilament protein NF-H C term	51	3e-06
gi 33302611 sp P12036 NFH_HUMAN	Neurofilament triplet H pro...	51	3e-06
gi 27529742 obj BAA74868.2	KIAA0845 protein [Homo sapiens]	51	3e-06
gi 284668 pir B43427	neurofilament protein H form H2 (repe...	51	3e-06
gi 284667 pir A43427	neurofilament triplet H1 protein - ra...	51	3e-06
gi 14250426 gb AAH08648.1	Unknown (protein for IMAGE:38662...	51	3e-06
gi 108359 pir S02571	neurofilament triplet protein H - pig...	51	3e-06
gi 24020878 gb AAN40837.1	heavy neurofilament protein [Can...	51	3e-06

gi 71549 pir QFHUH	neurofilament triplet H protein - human...	51	3e-06	
gi 32483416 ref NP_066554.2 	neurofilament, heavy polypepti...	51	3e-06	
gi 29789026 ref NP_036739.1 	neurofilament, heavy polypepti...	47	3e-05	
gi 21429606 gb AAM49796.1 	heavy neurofilament NF-H [Rattus...	47	3e-05	
gi 205686 gb AAA41695.1 	heavy neurofilament subunit	47	3e-05	
gi 205680 gb AAA41692.1 	high molecular weight neurofilament	47	3e-05	
gi 92538 pir S02003	neurofilament triplet H protein - rat ...	44	3e-04	
gi 46275814 ref NP_035034.1 	neurofilament, heavy polypepti...	44	3e-04	
gi 128127 sp P19246 NFH_MOUSE	Neurofilament triplet H prote...	44	3e-04	
gi 28972433 dbj BAC65670.1 	mKIAA0845 protein [Mus musculus]	44	3e-04	
gi 462702 sp P16884 NFH_RAT	Neurofilament triplet H protein...	44	3e-04	
gi 463250 emb CAA83229.1 	Neurofilament protein, high molec...	44	3e-04	
gi 7428714 pir QFPGM	neurofilament triplet M protein - pig...	35	0.23	
gi 33468430 emb CAD70271.1 	Secp1 protein precursor [Tricho...	32	1.0	
gi 39586313 emb CAE66724.1 	Hypothetical protein CBG12070 [...]	32	1.8	
gi 13629976 sp O77788 NFM_BOVIN	Neurofilament triplet M pro...	32	1.8	
gi 1160355 gb AAB00542.1 	UNC-89	31	3.3	
gi 7511618 pir T29757	protein UNC-89 - Caenorhabditis elegans	31	3.3	
gi 31209313 ref XP_313623.1 	ENSANGP00000013035 [Anopheles ...	31	3.3	
gi 31746683 gb AAP68958.1 	Uncoordinated protein 89, isoform...	31	3.3	
gi 25141314 ref NP_491290.2 	UNCoordinated locomotion UNC-8...	31	3.3	
gi 2135810 pir I53671	neurofilament heavy subunit - human ...	30	4.4	
gi 39589705 emb CAE66940.1 	Hypothetical protein CBG12332 [...]	29	8.0	
gi 42521813 ref NP_967193.1 	TonB-like protein [Bdellovibri...	29	8.0	
gi 19075023 ref NP_586624.1 	similarity to GLYPICAN-4 (HEPA...	29	14	
gi 14549637 gb AAK66966.1 	histone H1 [Bufo bufo gargarizans]	29	14	
gi 4885513 ref NP_005373.1 	neurofilament 3 (150kDa medium)...	28	19	
gi 6003540 gb AAF00492.1 	neurofilament-3 (150 kD medium) [...]	28	19	
gi 42523806 ref NP_969186.1 	conserved hypothetical protein...	28	19	
gi 423935 pir A46194	neurofilament protein NF-220, high-mo...	28	19	
gi 45682130 ref ZP_00193566.1 	COG1250: 3-hydroxyacyl-CoA d...	28	19	
gi 30466260 ref NP_848668.1 	breast cancer 1, early onset [...]	27	35	
gi 20808711 ref NP_623882.1 	Sugar-binding periplasmic prot...	27	35	
gi 47530684 ref YP_022033.1 	conserved hypothetical protein...	27	35	
gi 30023179 ref NP_834810.1 	hypothetical protein [Bacillus...	27	35	
gi 13195201 gb AAK15600.1 	BRCA1 [Bos taurus]	27	35	
gi 21225819 ref NP_631598.1 	putative solute binding lipopr...	27	35	
gi 30265170 ref NP_847547.1 	lipoprotein, putative [Bacillu...	27	35	
gi 121922 sp P06893 H1B_XENLA	HISTONE H1B >gi 2118972 pir ...	27	35	
gi 70670 pir HSXL1B	histone H1B - African clawed frog	27	35	
gi 13235457 emb CAC33750.1 	Guanosine-3,5-bis(diphosphate) ...	27	46	
gi 7160454 emb CAB71173.2 	calpastatin [Xenopus laevis]	27	46	
gi 13235476 emb CAC33635.1 	Guanosine-3,5-bis(diphosphate) ...	27	46	
gi 42453561 ref ZP_00153468.1 	hypothetical protein Rick041...	27	46	
gi 34580646 ref ZP_00142126.1 	hypothetical (p)ppGpp 3-pyro...	27	46	
gi 15892349 ref NP_360063.1 	similarity to (p)ppGpp 3-pyrop...	27	46	
gi 39595873 emb CAE67376.1 	Hypothetical protein CBG12854 [...]	27	46	
gi 14599407 emb CAC43460.1 	probable major surface glycopro...	27	46	
gi 47228946 emb CAG09461.1 	unnamed protein product [Tetrao...	27	46	
gi 7160452 emb CAB62094.2 	calpastatin, putative [Xenopus l...	27	46	
gi 42526504 ref NP_971602.1 	lipoprotein, putative [Trepone...	27	46	
gi 38085027 ref XP_112637.4 	similar to KIAA0819 protein [M...	27	62	
gi 8163668 gb AAF73792.1 	surface protein PspC [Streptococc...	27	62	

gi 8163642 gb AAF73778.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 6469853 gb AAF13459.1 	unknown [Streptococcus pneumoniae]	<u>27</u>	62
gi 8163676 gb AAF73796.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 8163720 gb AAF73822.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 8163657 gb AAF73786.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 2981173 gb AAC06245.1 	neurofilament medium subunit [Ser...]	<u>27</u>	62
gi 8163695 gb AAF73807.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 121918 sp P06892 H1A_XENLA HISTONE H1A > gi 64775 emb CAA...	HISTONE H1A > gi 64775 emb CAA...	<u>27</u>	62
gi 2511705 emb CAA71783.1 	sigA binding protein [Streptococ...]	<u>27</u>	62
gi 38085577 ref XP_359324.1 	similar to KIAA0819 protein [M...]	<u>27</u>	62
gi 8163701 gb AAF73810.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 46433713 gb EAK93144.1 	hypothetical protein CaO19.6126 ...	<u>27</u>	62
gi 8163680 gb AAF73798.1 	surface protein PspC [Streptococc...]	<u>27</u>	62
gi 21398433 ref NP_654418.1 	hypothetical protein predicted...	<u>27</u>	62
gi 15901997 ref NP_346601.1 	choline binding protein A [Str...]	<u>27</u>	62
gi 128146 sp P16053 NFM_CHICK Neurofilament triplet M prote...	Neurofilament triplet M prote...	<u>27</u>	62
gi 70669 pir HSXL1A 	histone H1A - African clawed frog	<u>27</u>	62
gi 14718664 gb AAK72978.1 	choline-binding protein A CbpA [...]	<u>27</u>	62
gi 14718658 gb AAK72975.1 	choline-binding protein A CbpA [...]	<u>27</u>	62
gi 63686 emb CAA29073.1 	NF-M c-terminus [Gallus gallus]	<u>27</u>	62
gi 729671 sp P40280 H2A_MAIZE Histone H2A > gi 7439704 pir ...	Histone H2A > gi 7439704 pir ...	<u>26</u>	84
gi 31232261 ref XP_318672.1 	ENSANGP00000010373 [Anopheles ...]	<u>26</u>	84
gi 10720231 sp O80333 POR_MARPA 	Protochlorophyllide reducta...	<u>26</u>	84
gi 45914575 ref ZP_00196729.1 	COG3422: Uncharacterized con...	<u>26</u>	84
gi 15239648 ref NP_200257.1 	wound-responsive protein-relat...	<u>26</u>	84
gi 23027642 ref ZP_00066080.1 	COG2207: AraC-type DNA-bindin...	<u>26</u>	84
gi 46188546 ref ZP_00124737.2 	hypothetical protein Psyr021...	<u>26</u>	84
gi 39597796 emb CAE68488.1 	Hypothetical protein CBG14291 [...]	<u>26</u>	84
gi 5834783 emb CAB55338.1 	hypothetical protein [Yarrowia l...	<u>26</u>	84
gi 19074182 ref NP_584788.1 	hypothetical protein [Encephal...	<u>26</u>	112
gi 10437669 dbj BAB15083.1 	unnamed protein product [Homo s...	<u>26</u>	112
gi 34870062 ref XP_221810.2 	similar to CD209 antigen; dend...	<u>26</u>	112
gi 12858661 dbj BAB31400.1 	unnamed protein product [Mus mu...]	<u>26</u>	112
gi 13384730 ref NP_079640.1 	RIKEN cDNA 1110005A23 [Mus mus...]	<u>26</u>	112
gi 47198672 emb CAF93883.1 	unnamed protein product [Tetrao...	<u>26</u>	112
gi 33667044 ref NP_056244.2 	tarsh protein [Homo sapiens] >...	<u>26</u>	112
gi 45199188 ref NP_986217.1 	AFR669Wp [Eremothecium gossypi...	<u>26</u>	112
gi 21357739 ref NP_651601.1 	CG5520-PA [Drosophila melanoga...	<u>26</u>	112

Alignments

[Get selected sequences](#) [Select all](#) [Deselect all](#)

>[gi|601931|gb|AAA57153.1|](#) neurofilament-H
Length = 511

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKKEAKSPEKAK 16
AKSPVKKEAKSPEKAK
Sbjct: 348 AKSPVKKEAKSPEKAK 363

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 328 AKSPVKEEAKSPEKAK 343

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 308 AKSPVKEEAKSPEKAK 323

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 294 AKSPVKEEAKSPEKAK 309

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 274 AKSPVKEEAKSPEKAK 289

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 260 AKSPVKEEAKSPEKAK 275

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 240 AKSPVKEEAKSPEKAK 255

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16

AKSPVKEEAKSPEKAK
Sbjct: 226 AKSPVKEEAKSPEKAK 241

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 128 AKSPVKEEAKSPEKAK 143

Score = 45.2 bits (99), Expect = 2e-04
Identities = 14/14 (100%), Positives = 14/14 (100%)

Query: 1 AKSPVKEEAKSPEK 14
AKSPVKEEAKSPEK
Sbjct: 362 AKSPVKEEAKSPEK 375

Score = 45.2 bits (99), Expect = 2e-04
Identities = 15/16 (93%), Positives = 15/16 (93%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSP KEEAKSPEKAK
Sbjct: 194 AKSPEKEEAKSPEKAK 209

Score = 45.2 bits (99), Expect = 2e-04
Identities = 15/16 (93%), Positives = 15/16 (93%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSP KEEAKSPEKAK
Sbjct: 180 AKSPEKEEAKSPEKAK 195

Score = 44.3 bits (97), Expect = 3e-04
Identities = 16/22 (72%), Positives = 16/22 (72%), Gaps = 6/22 (27%)

Query: 1 AKSPVKE-----EAKSPEKAK 16
AKSPVKE EAKSPEKAK
Sbjct: 160 AKSPVKEEAKSPAEEAKSPEKAK 181

Score = 41.8 bits (91), Expect = 0.002
Identities = 14/16 (87%), Positives = 15/16 (93%)